AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A device for making quantified determinations of the quality of surfaces in the visible spectral range~~, having an optical system~~, comprising:

first optical means having at least one illuminating means, said at least one illuminating means emitting an emitted light at a predetermined angle to a measurement surface,

second optical means being aligned at a predetermined angle to said measurement surface, said second optical means for receiving a reflected light from said measurement surface, whereby said second optical means has at least one photo sensor for emitting an electrical measurement signal that is characteristic of the reflected light,

control and evaluation means for controlling a measurement sequence and for evaluating a measurement results said control and evaluation means having at least one processor device and at least one memory means,

output display means,

whereby said at least one illuminating means has at least one light source, wherein said at least one light source is a light diode,

whereby emitted light from said illuminating means is configured to provide a spectral characteristic having at least blue, green and red spectral components,

a filter means being arranged between said at least one light source and said at least one photo sensor to change the spectral characteristic of the emitted light and/or the reflected light in accordance with predetermined filter properties so that the spectral characteristic essentially approaches that of a predetermined spectral distribution,

whereby said control and evaluation means evaluates said reflected light and derives at least one parameter variable therefrom that is characteristic of said measurement surface, and

whereby the light diode has a wavelength-dependent spectral intensity that is in the wavelength range between 480 and 620 nm and is greater than one-hundredth of the maximum spectral intensity such that the light diode emits considerable intensity through essentially the entire visible spectral range.

2. (Previously presented) The device according to claim 1, wherein said characteristic parameter of said surface is gloss.

3. (Previously presented) The device according to claim 1, wherein two, three or more characteristic parameters of said surface are determined.

4. (Previously presented) The device according to claim 1, wherein at least one of said at least one characteristic parameter is selected from among a group of parameters which encompasses gloss, haze, distinctness of image and color.

5. (Previously presented) The device according to claim 1, wherein said at least one parameter is a representative measurement of a typical wavelength and amplitude of a topology of said measurement surface in a predetermined wavelength interval, whereby said evaluation may also be carried out in two or more wavelength bands.

6. (Currently amended) The device according to claim 5, wherein said predetermined spectral distribution is a standard distribution having a light ~~type taken from the standard light type groups~~ selected from the group consisting of a C light ~~type~~ standard, a D65 light ~~type~~ standard, and an A light ~~type~~ standard.

7. (Currently amended) The device according to claim 1, wherein a spectral measurement characteristic is an aggregate of the spectral characteristic of the emitted light and a spectral sensitivity of the at least one photo sensor in proportion to an aggregate of a spectral distribution of a light ~~type~~ standard and a sensitivity of a human eye.

8. (Previously presented) The device according to claim 1, wherein said filter means comprises at least one or several filters having predetermined spectral properties so that the spectral properties of said light emitted from said at least one light source can be specifically influenced.

9. (Previously presented) The device according to claim 1, further comprising a scatter disk arrangement and an aperture arrangement is arranged in said first optical means, whereby said scatter disk arrangement is configured such as to allow the achieving of a homogenous illumination of said measurement surface.

10. (Previously presented) The device according to claim 1, wherein said illuminating means further comprises at least a second light source.

11. (Previously presented) The device according to claim 1, wherein said evaluation means evaluates said measurement signal using a program stored in said memory means and/or saves said measurement signal into said memory means.

12. (Previously presented) The device according to claim 1, wherein said second optical means comprises a plurality of photo sensors arranged adjacent to one another.

13. (Previously presented) The device according to claim 1, wherein at least a first part of said emitted light exhibits a light pattern.

14. (Previously presented) The device according to claim 1, further comprising a plurality of light/dark edges with at least one part thereof extending at least sectionally parallel to one another.

15. (Previously presented) The device according to claim 12, wherein for at least some of said plurality of photo sensors, said evaluation means derives at least one gradient of the measurement signal from the difference between the measurement signal of one photo sensor and the measurement signal of a next photo sensor.

16. (Previously presented) The device according to claim 1, wherein said control and evaluation means is so configured that at least one average parameter for at least a portion of a gradient can be determined and a characteristic structural variable can be determined for a structure-contingent property of said measurement surface therefrom.

17. (Previously presented) The device according to claim 1, further comprising a third optical means having at least one light source emitting light at a predetermined spectral characteristic and which is directed at a predetermined angle to said measurement surface.

18. (Previously presented) The device according to claim 17, wherein said predetermined angle, at which said emitted light from said at least one of said first optical means is directed to said measurement surface, is an angle selected from the group of angles consisting of 0°, 10°, 15°, 20°, 30°, 45°, 60°, 75°, 80° and 85°.

19. (Previously presented) The device according to claim 18, further comprising at least a second optical system such that said optical systems are arranged at an angle of 20°, 60° and 85°.

20. (Previously presented) The device according to claim 19, further comprising a third optical system in which said light emitted from said third optical means is directed onto the surface at such an angle that the light directly reflected from said measurement surface in accordance with the Fresnel reflection has a different angle relative the measurement surface as the angle between said measurement surface and the light reflected from said measurement surface as emitted from said first optical means.

21. (Previously presented) The device according to claim 20, wherein said at least one light source of said third optical means comprises at least one light diode possessing spectral characteristics such that the color of its emitted light is white.

22. (Previously presented) The device according to claim 1, wherein at least one photo sensor has at least two photo sensitive elements, said at least two photo sensitive elements having electrical output signals that can be ascertained individually and that differ in their spectral characteristics, so that the color of said reflected light can be ascertained as an optical parameter of said measurement surface.

23. (Previously presented) The device according to claim 20, wherein said first and/or said third optical means emits essentially parallel light.

24. (Previously presented) The device according to claim 20, wherein said first and/or said third optical means emits essentially divergent or convergent light.

25. (Previously presented) The device according to claim 23, wherein at least one optical means emits at least one light strip at a predetermined length and width perpendicular to the direction of propagation.

26. (Previously presented) The device according to claim 25, further comprising at least one temperature measuring means for determining a characteristic temperature of each of said first and second optical means so that a temperature-corrected determination of at least one parameter can be made.

27. (Previously presented) The device according to claim 26, wherein at least a portion of a progression of an image of said at least one light/dark edge is defined on said plurality of photo sensors and a characteristic surface parameter of said measurement surface is determined from a deviation of a measured path from an ideal path.

28. (Previously presented) The device according to claim 1, wherein the device is moveable relative to said measurement surface at a constant spacing therefrom, wherein the device further comprises a distance measuring means that quantitatively ascertains a relative movement and a memory means for storing the structural and/or optical parameters measured along predetermined measurement points on said measurement surface.

29. (Previously presented) The device according to claim 28, further comprising at least one measurement wheel, wherein said at least one measurement wheel is positioned upon said measurement surface during measurement and rotates during said relative movement.

30. (Previously presented) The device according to claim 29, wherein at least one of said at least one measurement wheel is coupled with a rotating angle output device that emits an electrical rotating angle signal representative of the rotation angle returned by said measurement wheel.

31. (Currently amended) A method for making quantified determinations of the quality of surfaces in the visible spectral range, said method comprising:

providing first optical means having a first light source disposed as a light diode to direct an emitted light with blue, green and red spectral components at a predetermined angle onto a measurement surface;

providing second optical means having at least one photo sensor directed at a second predetermined angle to said measurement surface to receive a reflected light from said measurement surface, whereby said at least one photo sensor emits an electrical measurement signal that is characteristic of the reflected light;

providing control and evaluation means for controlling a measurement sequence and evaluating a measurement results, said control and evaluation means having at least one processor device and stores said measurement signal in a memory means;

providing an output display means for displaying said measurement results; and

evaluating said reflected light and deriving at least one parameter variable therefrom that is characteristic of said

measurement surface,

whereby the light diode has a wavelength-dependent spectral intensity in the wavelength range between 480 and 620 nm and is greater than one-hundredth of the maximum spectral intensity such that the light diode emits considerable intensity through essentially the entire visible spectral range.

32. (Previously presented) The device according to claim 10, wherein said second light source is a light diode.

33. (Previously presented) The device according to claim 10, wherein each of said first and second light sources has a differing spectral characteristic.

34. (Previously presented) The device according to claim 13, wherein said light pattern has at least one light/dark edge.

35. (Previously presented) The device according to claim 14, wherein at least one section of said plurality of light/dark edges is of a form taken from the group consisting of a grid form, a cross-mesh form, an ellipse form, and a circular form.

36. (Previously presented) The device according to claim 18, wherein said predetermined angle differs between the said first and second optical means.

37. (Previously presented) The device according to claim 22, wherein at least one photo sensor has at least three photo sensitive elements, said at least three photo sensitive elements has electrical output signals that can be ascertained individually and differ in their spectral characteristics so that

the color of said reflected light can be ascertained as an optical parameter of said measurement surface.

38. (Previously presented) The device according to claim 1, further comprising a measurement cycle of less than 0.2 seconds.